

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.- 26. (cancelled)

27. (currently amended): A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform is comprised of an optical glass comprising, by means of weight percentages, more than 32 percent and not more than 45 percent P_2O_5 , more than 0.5 percent and not more than 6 percent Li_2O , more than 5 percent and not more than 22 percent Na_2O , 6-30 percent Nb_2O_5 , 0.5-10 percent B_2O_3 , 0-35 percent WO_3 , 0-14 percent K_2O , and 10-24 percent $Na_2O + K_2O$, wherein the sum of the oxides of P, Li, Na, Nb, B, W, and K is not less than 80 percent and, wherein the optical glass does not comprise PbO .

28. (currently amended) The process of claim 4 27, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

29. (currently amended): The process of claim 4 27, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

30. (previously presented): The process of claim 29, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

31. (previously presented): A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article, wherein the press-molding glass preform is a preform prepared by the process of claim 27.

32. (previously presented): The process of claim 31, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of 107-108 dPa·s.

33. (previously presented): The process of claim 31, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than 109 dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of 109-1012 dPa·s.

34. (currently amended): A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform is comprised of an optical glass comprised of phosphate glass comprising, by means of weight percentages, more than 0.5 percent and not more than 6 percent Li_2O , more than 5 percent and not more than 22 percent Na_2O , 0-14 percent K_2O , 10-24 percent $\text{Na}_2\text{O} + \text{K}_2\text{O}$, 6-30 percent Nb_2O_5 , and not more than 45 percent P_2O_5 , and exhibits a refractive index (nd) of 1.64-1.72, an Abbé number (vd) of 29-36, a sag temperature (T_s) of not more than 520°C and wherein the optical glass does not comprise PbO.

35. (previously presented): The process of claim 34, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

36. (previously presented): The process of claim 34, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

37. (previously presented): The process of claim 36, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

38. (previously presented): A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,

wherein the press-molding glass preform is a preform prepared by the process of claim 34.

39. (previously presented): The process of claim 38, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of 10^7 - 10^8 dPa·s.

40. (previously presented): The process of claim 38, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than 10^9 dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of 10^9 - 10^{12} dPa·s.

41. (currently amended): A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform is comprised of an optical glass comprised of phosphate glass comprising, by means of weight percentages, more than 0.5 percent and not more than 6 percent Li_2O , more than 5 percent and not more than 22 percent Na_2O , 0-14 percent K_2O , 10-24 percent $\text{Na}_2\text{O} + \text{K}_2\text{O}$, 6-30 percent Nb_2O_5 , 0-35 percent WO_3 , 0-5 percent Al_2O_3 , and ~~not less than 0 percent~~ or greater but less than 8 percent TiO_2 , and exhibits a refractive index (nd) of 1.64-1.72, an Abbé number (vd) of 29-36, a sag temperature (T_s) of not more than 520°C and wherein the optical glass does not comprise PbO .

42. (previously presented): The process of claim 41, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

43. (previously presented): The process of claim 41, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

44. (previously presented): The process of claim 43, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

45. (previously presented): A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,

wherein the press-molding glass preform is a preform prepared by the process of claim 41.

46. (previously presented): The process of claim 45, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of 10^7 - 10^8 dPa·s.

47. (previously presented): The process of claim 45, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than 10^9 dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of 10^9 - 10^{12} dPa·s.

48. (currently amended): A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform comprises, by means of weight percentages, more than 32 percent and not more than 45 percent P_2O_5 , more than 0.5 percent and not more than 6 percent Li_2O , more than 5 percent and not more than 22 percent Na_2O , 630 percent Nb_2O_5 , 0.5-10 percent B_2O_3 , 0-35 percent WO_3 , 0-14 percent K_2O , and 10-24 percent $Na_2O + K_2O$, 0-2 percent SiO_2 , 0-5 percent Al_2O_3 , not less than 0 percent or greater but less than 8 percent TiO_2 , 0-15 percent ZnO , 0-12 percent BaO , not less than 0 percent or greater but less than 1 percent Sb_2O_3 , and 0-1 percent SnO_2 , wherein the sum of the oxides of P, Li, Na, Nb, B, W, K, Si, Al, Ti, Zn, Ba, Sb, and Sn is not less than 95 percent, and exhibits a refractive index (nd) of 1.64-1.72, an Abbe number (vd) of 29-36, a sag temperature (Ts) of not more than 520°C and wherein the optical glass does not comprise PbO .

49. (previously presented): The process of claim 48, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

50. (previously presented): The process of claim 48, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

51. (previously presented): The process of claim 50, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

52. (previously presented): A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,

wherein the press-molding glass preform is a preform prepared by the process of claim

48.

53. (previously presented): The process of claim 52, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of 10^7 - 10^8 dPa·s.

54. (previously presented): The process of claim 52, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than 10^9 dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of 109-1012 dPa·s.

55. (currently amended) A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform, wherein the press-molding glass preform is comprised of an optical glass comprised of phosphate glass comprising Li_2O , Na_2O , Nb_2O_5 , and B_2O_3 as essential components, and 02 percent SiO_2 with a refractive index (nd) of 1.64-1.72, an Abbè number (vd) of 29-36, a sag temperature (T_s) of not more than 520°C , and a liquidus temperature (LT) of not more than 900°C and wherein the optical glass does not comprise PbO .

56. (previously presented) The process of claim 55, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

57. (previously presented) The process of claim 55, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

58. (previously presented) The process of claim 57, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

59. (previously presented) A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,

wherein the press-molding glass preform is a preform prepared by the process of claim 55.

60. (previously presented) The process of claim 59, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of 10^7 - 10^8 dPa·s.

61. (previously presented) The process of claim 59, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than 10^9 dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of 10^9 - 10^{12} dPa·s.

62. (currently amended) A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform is comprised of an optical glass comprising, by means of weight percentage, not more than 45 percent P_2O_5 , more than 0.5 percent but not more than 6 percent Li_2O , not more than 22 percent Na_2O , not less than 6 percent Nb_2O_5 , 0.35 percent WO_3 , 0-14 percent K_2O , wherein the sum of the oxides of P, Li, Na, Nb, W, and K is not less than 80 percent, and exhibits a sag temperature (T_s) of not more than 520°C, and a liquidus temperature (LT) of not more than 900°C and wherein the optical glass does not comprise PbO .

63. (previously presented) The process of claim 62, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

64. (previously presented) The process of claim 62, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

65. (previously presented) The process of claim 64, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

66. (previously presented) A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,

wherein the press-molding glass preform is a preform prepared by the process of claim 62.

67. (previously presented) The process of claim 66, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of 10^7 - 10^8 dPa·s.

68. (previously presented) The process of claim 66, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than 10^9 dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of 10^9 - 10^{12} dPa·s.

69. (currently amended) A process for preparation of a press-molding glass preform in which a glass melt is dripped or flowed out of a flow pipe and received in a receiving mold via a gas, and the resulting glass gob is shaped to a desired shape to produce a preform,

wherein the press-molding glass preform is comprised of an optical glass comprising, by means of weight percentage, not more than 45 percent P_2O_5 , more than 0.5 percent but not more than 6 percent Li_2O , not more than 22 percent Na_2O , not less than 6 percent Nb_2O_5 , 0-35 percent WO_3 , 0-14 percent K_2O , wherein the sum of the oxides of P, Li, Na, Nb, W, and K is not less than 80 percent, and exhibits a refractive index (nd) of not less than 1.64, and an Abbé number (vd) of not more than 36 and wherein the optical glass does not comprise PbO .

70. (previously presented) The process of claim 69, wherein the dripped glass has a viscosity ranging from 3 to 30 dPa·s.

71. (previously presented) The process of claim 69, wherein the flowed glass has a viscosity ranging from 5 to 60 dPa·s.

72. (previously presented) The process of claim 71, wherein the receiving mold is lowered to sever the glass flow to produce a glass gob.

73. (previously presented) A process for preparation of an optical article in which a press-molding glass preform is heated and press-molded to produce the optical article,

wherein the press-molding glass preform is a preform prepared by the process of claim 69.

74. (previously presented) The process of claim 73, wherein the glass preform is positioned between a lower mold and an upper mold and the glass preform is subsequently heated to a temperature at which the glass preform exhibits a viscosity of 10^7 - 10^8 dPa·s.

75. (previously presented) The process of claim 73, wherein the glass preform is heated to a temperature corresponding to a viscosity in the glass preform of less than 10^9 dPa·s and softened, and the softened glass preform is press-molded with a mold preheated to a temperature at which the glass preform exhibits a viscosity of 10^9 - 10^{12} dPa·s.